

Remarks

Claims 1-15 and 17-21 are pending in the present application. Claim 17 is withdrawn from consideration. Claim 21 is allowed. Claims 1-7, 11-14, and 16-20 are rejected. Claim 8-10 and 15 are objected to.

The amendment to claim 18 is represented since in the last response, claim 18 was incorrectly designated as "original". Claim 18 is amended in an analogous manner to include the limitation: "the catalyst being positionable in a forward position in the exhaust relative to a second catalyst for optimizing the reduction of hydrocarbon, NO_x and CO emissions under stoichiometric air/fuel ratios, the second catalyst comprising a catalyst mixture PM-Rh where PM is a catalyst material selected from the group consisting of platinum, palladium and combinations thereof."

1. Rejection Under 35 U.S.C. §103

Claims 1-7, 11-14, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP0941757.

In explaining the present rejection, the Examiner has misinterpreted and artificially dissected the teachings of EP0941757. In order to reconstruct the dual catalyst system of independent claims 1 and 18 of the present invention, the Examiner splits a single catalyst structure in the EP0941757 into two. The Examiner states:

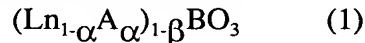
Applicant argues that the EP reference does not teach a configuration in which a catalyst comprising a catalyst mixture PM-Rh is place downstream of a catalyst having a Perovskite type ABO₃ crystal structure as required by the independent claims. However, the examiner disagrees. With reference the Figure in the EP reference, the reference discloses a **first powder (considered to meet the "second catalyst" instantly claimed) and a second powder (considered to meet the "first catalyst" instantly claimed)**, wherein the first and second

powder are closely coupled and the second powder is in a forward position and the first powder is in a downstream position. Therefore, the reference discloses the configuration claimed herein.

Office Action dated August 16, 2005

EP0941757 unambiguously discloses that a **single** catalyst – “the first catalyst” – includes a first powder and a second powder:

According to the present invention, there is provided a device for purifying an exhaust gas. This device comprises a first catalyst for purifying NO_x of the exhaust gas. **This first catalyst comprises first and second powders.** The first powder comprises a porous carrier and at least one noble metal loaded on the porous carrier. The at least one noble metal is selected from the group consisting of platinum, palladium and rhodium. The second powder comprises a first double oxide represented by the following general formula (1):



EP0941757, p. 2, l. 30-36

It is evident that EP0941757 discloses a catalyst in which the Perovskite component and the PH-Rh components are combined into a single catalyst. The present invention discloses discrete catalysts that are individually positionable in upstream and downstream locations.

Notwithstanding this analysis, even if the Examiner’s illogical and unnatural interpretation is adopted, EP0941757 is still deficient because it does not disclose that the limitation – “the first catalyst being placed in a forward position and the second catalyst being placed in a downstream position in the exhaust stream.” This relative positioning of the two catalysts is not possible since the first and second powders are intimately mixed together rendering such placement impossible. The examples provided in EP0941757 make it clear that the powders are mixed and ground in a magnetic ball mill (see examples 1-1 to 1-10 of EP0941757).

As set forth in Applicants' June 10, 2005 amendment, the actual second catalyst used in EP0941757 is a completely different catalyst than those taught in the present invention. Specifically, it is a sulfur oxide absorbing catalyst that is placed upstream of the Perovskite containing catalyst. (EP 0 941 757, p. 5, ll. 15-26. In the present invention, the second catalyst is not sulfur oxide absorbing and is placed downstream of the Perovskite containing catalyst.

Accordingly, for at least these reasons, claims 1-7, 11-14, 16, and 18-20 are patentable under 35 U.S.C. 103(a) over EP0941757.


Conclusion

Applicants have made a genuine effort to respond to each of the Examiner's rejections in advancing the prosecution of this case. Applicants believe that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. If a telephone or video conference would help expedite allowance or resolve any additional questions, such a conference is invited at the Examiner's convenience.

The Commissioner is authorized to charge any additional fees or credit any overpayments as a result of the filing of this paper to Ford Global Technologies, LLC Deposit Account No. 06-1510.

Respectfully submitted,

Haren S. Gandhi et al.

By 
James W. Proscia
Reg. No. 47,010
Attorney/Agent for Applicant

Date: November 16, 2005

BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351